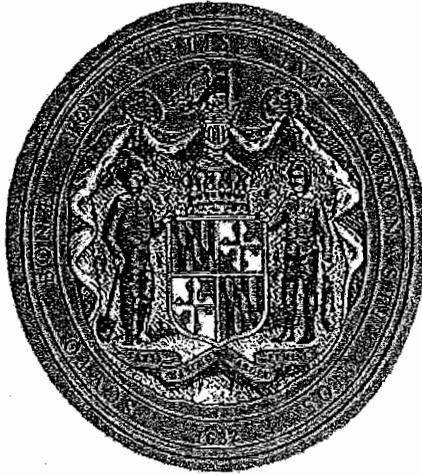


CALENDAR YEAR 2005
EIGHTY-FOURTH ANNUAL REPORT
Of The
MARYLAND BUREAU OF MINES



HON. ROBERT L. EHRlich, JR.
Governor of Maryland

DEPARTMENT OF THE ENVIRONMENT
KENDL P. PHILBRICK, Secretary

WATER MANAGEMENT ADMINISTRATION
ROBERT SUMMERS, Director

MINING PROGRAM
C. EDMON LARRIMORE, Program Manager

BUREAU OF MINES
JOHN E. CAREY, Director

FOR THE CALENDAR YEAR 2005

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION
MINING PROGRAM
BUREAU OF MINES

FROSTBURG, MARYLAND 21532

LETTER OF TRANSMITTAL

To The Honorable:

ROBERT L. EHRlich, JR.

Governor of Maryland

Sir:

It is my honor to submit herewith the Eighty-Fourth Annual Report of the Maryland Bureau Of Mines for the period of January 1, 2005 through December 31, 2005, in compliance with the mining laws of the State of Maryland. This report provides information pertaining to the conditions of the coal mining industry within the State.

Respectfully submitted,

John E. Carey, *Director*

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EXECUTIVE SUMMARY

During calendar year 2005, Maryland operators produced 5,830,565 tons of coal. Surface coal mining production was 2,566,188 tons — 1,317,373 in Allegany County and 1,248,815 in Garrett County. Deep coal mining production was 3,264,377 tons, all in Garrett County.

Ninety-two permitting actions were received and eighty-eight permitting actions were issued, including issuance of three original permits, four permit increments, and eight permit amendments, totaling 226 acres. Included in the permitting actions were 2 original operator's licenses and 26 operator's license renewals. Other permit actions include: modifications, transfers and prospecting permits.

Two hundred forty-nine acres were affected, 129 acres backfilled, and 125 acres planted. Bond was totally released on 11 acres. There were no permits completed during 2005.

One thousand nineteen inspections were performed on coal mining operations. Twenty-six Notices of Violations were issued. Thirty Citizen Complaints were received and investigated and there were no cessation orders issued. There was also no Bond Forfeitures during this calendar year.

The Land Reclamation Committee met eleven times and approved four reclamation plans. The Committee also evaluated the revegetation on 152 acres eligible for Phase II bond release and approved 116 acres as meeting the standards for release.

The Maryland Bureau of Mines administers two programs to reclaim and/or restore land and water resources adversely affected by past coal mining practices. These two programs are: (1) Maryland-Federal Abandoned Mine Reclamation Program, implemented utilizing Federal funds available under the Federal Surface Mining Control and Reclamation Act of 1977 (U.S. Public Law 95-87) under the authority of Environment Article, Title 15, Subtitle 9 of the Annotated Code of Maryland, and (2) Maryland Mine Reclamation Program implemented utilizing funds from the Bituminous Coal Open-Pit Mining Reclamation Fund (BCOMRF) under the authority of Environment Article, Title 15, Subtitle 5; the Deep Mining Fund under the authority of Environment Article, Title 15, Subtitle 6; and the Mine Reclamation and Water Quality Restoration Loan under the authority of Environment Article, Title 15, Subtitle 7. These controls require ongoing maintenance and are improving 81.5 miles of AMD impaired stream in the Maryland coal region. Construction and upgrade costs for the work completed by AMDS in 2005 totaled \$1,612,512.00.

The Acid Mine Drainage Section (AMDS), during the period of January 1, 2005 to December 31, 2005, began the upgrade of the existing Kempton Air Shaft Doser Project by installing an aeration system and a sediment collection system and completed the construction of six new treatment systems. During the year, AMDS also continued designing and permitting for six additional AMD remediation projects that are scheduled for construction during the summer of 2006. The Kempton Air Shaft Doser Project was upgraded to allow for the recovery of the downstream wetland and for the more efficient and effective treatment of the AMD at this site. The Project was begun during 2005 and will be completed in early 2006 and will improve four miles of Laurel Run, allowing for more improvements in the upper reaches of the Potomac River and complete recovery of approximately 5 acres of wetland. Since AMD remediation efforts were initiated in 1992, a total of 28 mine drainage controls have been constructed and are continuously operated and maintained by the Bureau of Mines personnel.

In late August of 2005, significant changes occurred in the quantity and water quality at the McDonald Mine acid mine drainage (AMD) seep. The mine began discharging acid mine drainage, impacting approximately four miles of Georges Creek. Had it not been for the existing doser already installed at the site, the North Branch of the Potomac River may have also been negatively impacted. The Bureau of Mines AMD section is continuing to monitor the McDonald Mine seep as well as the water quality of the Georges Creek river basin on a biweekly basis, and is continuing to look for alternative treatments and funding sources to solve this dilemma.

FOR CALENDAR YEAR 2005

MINING PROGRAM

C. Edmon Larrimore	Program Manager, Mining Program
Ruth D. Booth	Administrator II
Sallie Shuman	Administrative Officer I

BUREAU OF MINES

John E. Carey	Director, Bureau of Mines
Barbara E. Murphy	Office Secretary III

Abandoned Mine Lands Section

Michael P. Gamer – Section Chief	Water Resources Engineer V
John C. Eilers	Energy Resources Administrator I
Bradley Nee	Water Resources Engineer IV
Mark Camey	Water Resources Engineer IV
Randall Matthews	Conservation Associate V
Scot Nicol	Conservation Associate III

Permitting and Regulatory Section

Stephen M. Layton – Section Chief	Energy Resources Administrator I
	1/01/05 –5/31/05 (Retired)
Jeffery Snyder	Engineer III
Alan V. Hooker	Administrator II
	Acting Section Chief – 6/01/05

Acid Mine Drainage Section

Constance A. Lyons – Section Chief	Natural Resources Planner V
Michelle Arrington	Envir. Compliance Specialist III
Joseph E. Mills	Natural Resources Planner IV
Tamara Davis	Natural Resources Planner IV

Laboratory & Support Services

Mary Lynn Pegg – Section Chief	Geologist V
Julie O'Connor	Chemist IV

Mining Inspection and Compliance

William Murphy	Envir. Compliance Specialist III
Thomas P. Murray	Envir. Compliance Specialist IV

**FOR THE CALENDAR YEAR 2005
REPORT OF THE MARYLAND BUREAU OF MINES**

Coal production in Maryland during 2005 totaled 5,336,218.22 tons. Production in 2005 represents an increase of 190,648.72 tons from the 2003 production of 5,145,569.50 tons.

**SUMMARY OF 2005
STATISTICS¹**

COAL PRODUCTION

Mining Method	Allegheny County	Garrett County	Total
Strip	1,317,372.53	1,248,815.11	2,566,187.64
Deep	.00	3,264,377.50	3,264,377.50
Auger	.00	.00	.00
TOTALS	1,317,372.53	4,513,192.61	5,830,565.14

EMPLOYEES²

Type of Mine	Allegheny County	Garrett County	Total
Deep	0	221	221
Strip	139	131	270
TOTALS	139	352	491

¹Reports submitted by Maryland mining operators.

²These figures do not include office, supervisor personnel, or independent truck haulers.

**FOR THE CALENDAR YEAR 2005
TONNAGE BY COAL SEAMS**

Allegheny County

Waynesburg	103,558.92
Sewickley (Tyson)	6,797.89
Redstone	373,364.81
Pittsburgh	564,092.40
Morantown	48,069.71
L. Pittsburgh	133,368.52
Franklin	88,120.28
Harlem	0
Bakerstown	0
Freeport	0
Kittanning	0
Federal Hill	0
Barton	0

TOTAL 1,317,372.53

Garrett County

Sewickley	27,138.55
Pittsburgh	155,152.91
Morantown	77,974.58
L. Pittsburgh	49,249.53
Franklin	89,086.58
Barton	175,627.52
Elk Lick	10,868.10
Harlem	18,100.65
Bakerstown	79,952.81
Upper Freeport	85,923.48
Freeport	3,089,387.03
Kittanning	537,437.34
Redstone	109,704.37
Evans	6,966.16
Waynesburg	623.00

TOTAL 4,513,192.61

TONNAGE BY BASIN

Lower Youghiogheny	0
Upper Youghiogheny	0
Casselman	0
Casselman (Cherry Creek)	0
Potomac	3,837,276.11
George's Creek	1,993,289.03

TOTAL 5,830,565.14

CALENDAR YEAR 2005
COAL PRODUCTION, MINING AND RECLAMATION STATISTICS FOR ALLEGANY & GARRETT COUNTIES*

*This table includes all permits on which there was production, mining, backfilling or planting activity. This table does not include permits on which all bonds have been released or forfeited, or permits on which bonds are still held but no production or mining or reclamation activity occurred.

ALLEGANY COUNTY

Operator	Permit Number	Coal Seam Worked	Deep	PRODUCTION (TONS)		Auger	Acres Affected	Acres Backfilled	Acres Planted
				Strip	Auger				
Barton Mining Company, Inc.	338	Pittsburgh		850.54			0.0	0.0	0.0
		L.Pittsburgh		166.65			0.0	11.0	0.0
		Pittsburgh		66,102.65			--	--	--
		L.Pittsburgh		49,731.35			--	--	--
		Moranstown		25,160.53			--	--	--
Brashear Coal Mines	264	Redstone		27,589.39			--	--	--
		Sewickley		4,250.74			--	--	--
		Franklin		77,549.09			11.0	10.0	10.0
Clise Coal Company	213	Waynesburg		10,571.19			26.0	17.0	17.0
		Waynesburg		0.00			0.0	17.0	17.0
Cobra Mining, Inc.	404	Waynesburg		20,519.71			0.5	0.0	3.5
		Pittsburgh		0.00			0.0	0.0	2.0
		Moranstown		15,102.81			0.0	0.0	0.0
		Redstone		2,617.04			--	--	--
Fairview Coal Co., Inc.	399	Pittsburgh		10,245.71			3.0	0.0	0.0
		Redstone		4,153.27			--	--	--
		Moranstown		1,937.51			--	--	--
G & S Coal Company, Inc.	440	Pittsburgh		6,973.50			16.0	0.0	0.0
		L.Pittsburgh		54,825.90			--	--	--
		Moranstown		3,053.10			--	--	--
Jenkins Development Co., Inc.	411	Waynesburg		76,186.95			7.5	3.5	3.5
		Pittsburgh		7,093.27			0.0	0.0	0.0
Tri-Star Mining, Inc.	419	Pittsburgh		431,603.67			5.0	12.0	0.0
		L.Pittsburgh		28,601.60			--	--	--
		Moranstown		28,045.82			--	--	--
		Sewickley		1,947.15			--	--	--
		Redstone		53,446.88			--	--	--
Waynesburg		4,840.75			--	--	--		

Operator	Permit Number	Coal Seam Worked	Deep	PRODUCTION (TONS)		Auger	Acres Affected	Acres Backfilled	Acres Planned
				Strip	Auger				
United Energy Coal, Inc.	403	Redstone		1,424.18			0.0	0.0	0.0
	407	Pittsburgh		5,266.34			0.0	0.0	0.0
		Redstone		10,518.21					
	439	Pittsburgh		21,632.02			0.0	0.0	0.0
Win-More Mining & Const. Co., Inc.		Redstone		274,078.15					
	433	Pittsburgh		2,895.48			3.0	5.0	0.0
TOTAL ALLEGANY COUNTY				1,317,372.53			73.0	79.0	53.0

GARRETT COUNTY

Operator	Permit Number	Coal Seam Worked	Deep	PRODUCTION (TONS) Strip	Auger	Acres Affected	Acres Backfilled	Acres Planted
Backbone Mountain, LLC G & S Coal Company, Inc.	DM112	Freeport	281,311.86	15,606.70		31.4	13.7	13.7
	431	Franklin		19,582.40		8.0	0.0	0.0
	435	Bakerstown		10,888.10		22.0	8.0	22.0
		Elk Lick		18,100.65		--	--	--
George Creek, Inc. Merrill Coal Corporation	DM111	Barton	174,950.47			0.0	0.0	0.0
	428	Upper Freeport		85,923.48		18.8	0.0	0.0
Moran Coal Company	DM101	Bakerstown		51,941.01		0.0	0.0	0.0
	446	Freeport	2,808,075.17	18,532.97		14.0	0.0	0.0
	448	L.Pittsburgh		27,138.55		24.0	0.0	0.0
	431	Sewickley		6,419.40		0.0	0.0	0.0
Patriot Mining Co., Inc. Pine Mountain Coal Company	424	Bakerstown		1,622.45		1.0	0.0	0.0
		Pittsburgh		3,843.82		--	--	--
Tri-Star Mining, Inc.		Moranstown		1,219.72		--	--	--
		Neustone		153,570.46		(See	Allegany	County)
	419	Pittsburgh		30,716.56		--	--	--
		L.Pittsburgh		109,484.66		--	--	--
		Neustone		74,140.76		--	--	--
		Moranstown		623.00		--	--	--
Vindex Energy Corporation	434	Waysideburg		73,479.88		13.0	13.0	13.0
	444	Franklin		6,966.16		0.0	0.0	0.0
	443	Evans		637.05		0.0	0.0	0.0
	Barton		537,437.34		43.8	17.3	23.3	
TOTAL GARRETT COUNTY			3,264,377.50	1,248,815.11		175.9	50.0	72.0
TOTAL BOTH COUNTIES			3,264,377.50	2,566,187.64		248.9	128.0	125.0

FOR CALENDAR YEAR 2005
SUMMARY OF LAND MINED, BACKFILLED, AND PLANTED IN 2005
 (By Geological Basin)

<u>ACRES THIS YEAR</u>					
	Permitted	Affected	Backfilled	Planted	Bond Released*
Allegany County:					
Georges Creek Basin	115.30	73.00	79.00	53.00	11.00
Garrett County:					
Georges Creek Basin	26.00	14.00	13.00	13.00	0.00
Potomac River Basin	73.00	162.00	37.00	59.00	0.00
Casselman River Basin**	0.00	0.00	0.00	0.00	0.00
Cherry Creek Basin	0.00	0.00	0.00	0.00	0.00
Upper Yough Basin	0.00	0.00	0.00	0.00	0.00
Lower Yough Basin	0.00	0.00	0.00	0.00	0.00
TOTAL GARRETT COUNTY	99.00	176.00	50.00	72.00	0.00
TOTAL BOTH COUNTIES	214.30	249.00	129.00	125.00	11.00

ACRES CUMULATIVE FROM JANUARY 1, 1975 - DECEMBER 31, 2005

Allegany County:					
Georges Creek Basin	7,342.30	6,155.50	5,400.47	5,490.30	4,499.00
Garrett County:					
Georges Creek Basin	2,772.00	2,669.95	2,416.80	2,736.81	2,643.60
Potomac River Basin	5,137.00	3,849.30	3,752.10	3,913.40	3,955.40
Casselman River Basin**	1,416.60	1,135.00	1,260.50	1,142.20	1,265.80
Cherry Creek Basin**	667.00	671.50	578.90	545.80	659.95
Upper Yough Basin	216.00	157.35	215.35	189.30	261.50
Lower Yough Basin	1,335.00	914.00	1,135.06	1,078.16	855.40
TOTAL GARRETT COUNTY	11,543.60	9,397.10	9,356.71	9,605.67	9,641.65
TOTAL BOTH COUNTIES	18,885.90	15,552.60	14,759.18	15,095.97	14,140.65

*Total Bond Release by the Bureau.

**Total Casselman Geological Basin.

**PERMITTING ACTIVITY
CALENDAR YEAR 2005**

Type of Application	Surface Mines			Underground Mines			Other Facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
Original Permits	2	3	39	0	0	0	0	0	0	2	3	39
Permit Increments	5	4	82	0	0	0	0	0	0	5	4	82
Modifications/Revisions With Acreage	12	6	103	0	0	0	2	2	2	14	8	105
Modifications/Revisions Without Acreage	22	23		0	0		0	0		22	23	
Transfers	4	0		0	0		0	1		4	1	
Renewals	3	5		1	0		0	0		4	5	
Prospecting Permits	1	3		0	0		0	0		1	3	
Prospecting Letter of Intent	6	7		0	0		0	0		6	7	
Operators License Original	2	2		0	0		0	0		2	2	
Operators License Renewals	26	26		6	6		0	0		32	32	
Totals	83	79	224	7	6	0	2	3	2	92	88	226

**FOR THE CALENDAR YEAR 2005
LAND RECLAMATION COMMITTEE**

Members:

The following members served on the Land Reclamation Committee during 2005:

DEPARTMENT OF THE ENVIRONMENT REPRESENTATIVES:

Ed Larrimore, Chairman, Water Management Administration
Stephen M. Layton, Bureau of Mines (January – May 31)
John E. Carey, Bureau of Mines (As of June 1, 2005.)

DEPARTMENT OF NATURAL RESOURCES REPRESENTATIVES:

Jim Mullan, Wildlife Division
Robert Webster, Forestry Division
Alan Klotz, Freshwater Fisheries

CITIZEN REPRESENTATIVES

Edgar Harman, Garrett County
Robert Davis, Allegany County

COUNTY REPRESENTATIVES:

Margaret Jamison, Garrett County
Tim Carney, Allegany County

SOIL CONSERVATION DISTRICT REPRESENTATIVES:

Craig Hartsock, Allegany Soil Conservation District
Shaun Sanders, Garrett Soil Conservation District

COAL INDUSTRY REPRESENTATIVES:

Vaughn Miller
Tim Schwinabart

FOR THE CALENDAR YEAR 2005
FUNCTIONS AND DUTIES OF THE LAND RECLAMATION COMMITTEE

The Land Reclamation Committee is responsible for the approval of all reclamation plans submitted, as part of an application for a permit, to the Bureau of Mines and for the oversight of land reclamation activities on surface coal mining operations in Maryland.

The Land Reclamation Committee visits proposed and active mining sites to:

- (1) Determine the suitability of proposed reclamation plans;
- (2) Review mining and reclamation progress; and
- (3) Evaluate the success of revegetation practices.

During 2005, the Land Reclamation Committee conducted site visits on 7 days. These visits included field reviews of 5 proposed mining sites and 35 revegetation sites to evaluate the success of the revegetation.

The Land Reclamation Committee conducts meetings to:

1. Review and approve reclamation plans;
2. Review reclamation progress on active mining permits;
3. Evaluate the revegetation on areas eligible for Phase II bond release;
4. Review the surface coal mining laws, regulations and policies and recommend changes to improve effectiveness of the Maryland Regulatory program; and
5. Recommend research and cost-sharing projects to promote optimum revegetation of mine lands.

During 2005, the Land Reclamation Committee met 11 times. During these meetings, the Land Reclamation Committee approved 4 reclamation plans, evaluated 152 acres of revegetation eligible for Phase II bond release and approved 116 acres as meeting the standards for release. There were no reclamation plan changes during the year.

Reclamation Results Calendar Year 2005		
Bond Release Phase	Applicable Performance Standard	Acreage Released
Phase I	<ul style="list-style-type: none"> • Area restored to Approximate original contour • Topsoil replaced • Area seeded and mulched • Completion of all reclamation work on the permit or the open acre limit is reduced 	06
Phase II	<ul style="list-style-type: none"> • Revegetation established in accordance with approved reclamation plan and standards for success of revegetation met • The lands are not contributing suspended solids to stream flow or runoff outside the permit area • Temporary drainage control structures are removed or all permanent structures are inspected and approved • Land Reclamation Committee has inspected and approved the revegetation on the area 	24
Phase III	<ul style="list-style-type: none"> • Postmining land use/productivity restored • Successful permanent vegetation established • Groundwater recharge, quality and quantity restored • Surface water quality and quantity restored • Applicable bond liability period has expired 	11

2005 LRC Award Winner

The winner of the 2005 Land Reclamation award is Mountaineer Mining Corporation, Permit SM-01-438.

This seventeen-acre site known as the Porter Mine is located on Federal Hill, northeast of Eckhart, in Allegany County. Prior to the mining operation, the landscape was marred with subsidence holes and deep-mine entries as a result of abandoned Pittsburgh deep-mine workings. The site has been reclaimed to a hay field with abundant grasses. It blends well with the surrounding area and will be a productive part of the adjacent farm.

Each year the Land Reclamation Committee selects a coal operator to receive the reclamation award for the mining company that has performed outstanding reclamation on a permit site. This award is presented at the Maryland Coal Association business meeting in December.

Past Reclamation Award Winners

<u>Year</u>	<u>Company Name</u>	<u>Permit</u>
1984	Bridgeview Coal Company	356
1985	Brashear Coal Company	264
1986	Buffalo Coal Company	366
1987	Delta Mining, Inc.	345
1988	Beener Coal Company	143
1989	Brashear Coal Company	264
1990	Action Mining Company	394
1991	Patriot Mining Company	406
1992	S & G Coal Company	348
1993	Buffalo Coal Company	215
1994	G & S Coal Company	365
1995	John Duckworth Coal Company	372
1996	Buffalo Coal Company	409
1997	Tri Star Mining, Inc.	418
1998	G & S Coal Company	325
1999	Buffalo Coal Company	409
2000	Winner Bros. Coal Company	286
2001	Clise Coal Company	315
2002	Win-More Mining Company	273
2003	Pine Mountain Coal Company	420
2004	G & S Coal Company	365

**FOR CALENDAR YEAR 2005
ABANDONED MINE LAND RECLAMATION**

The Maryland Bureau of Mines administers two programs to reclaim and/or restore land and water resources adversely affected by past coal mining practices. These two programs are: (1) Maryland-Federal Abandoned Mine Reclamation Program, implemented utilizing Federal funds available under the Federal Surface Mining Control and Reclamation Act of 1977 (U.S. Public Law 95-87) under the authority of Environment Article, Title 15, Subtitle 9 of the Annotated Code of Maryland, and (2) Maryland Mine Reclamation Program implemented utilizing funds from the Bituminous Coal Open-Pit Mining Reclamation Fund (BCOMRF) under the authority of Environment Article, Title 15, Subtitle 5; the Deep Mining Fund under the authority of Environment Article, Title 15, Subtitle 6; and the Mine Reclamation and Water Quality Restoration Loan under the authority of Environment Article, Title 15, Subtitle 7.

Maryland - Federal Abandoned Mine Reclamation Program

The Maryland Abandoned Mine Land Reclamation Plan received Federal approval on July 16, 1982, thus enabling Maryland to receive Federal funds for the reclamation of abandoned mine lands. During 2005, grants awarded to Maryland by the U.S. Department of Interior, Office of Surface Mining, provided funds for the following abandoned mine land reclamation projects.

AML Projects Completed During 2005

1. **MILL RUN II ABANDONED MINE RECLAMATION PROJECT**
Location: 1.5 Miles southwest of Barton, Allegany County.
Nature: Reclamation of 2.5 acres of abandoned deep mine support facilities including removal of an abandoned ventilation fan, regarding of abandoned coal refuse and restoration of 200 linear feet of the stream channel of Mill Run.
Contractor: Excavating Associates, Inc.
Date Completed: July 5, 2005
Construction Cost: \$ 69,665.00
Fund Source: MD-Federal AML Fund

2. **MIDLOTHIAN SCHOOL MINE DRAINAGE TREATMENT PROJECT**
Location: Midlothian, Allegany County.
Nature: Collection and Treatment of Acid Mine Drainage seepage to eliminate public health and safety hazards to the Howard Brode property.
Contractor: Pine Mountain Coal Company

Date Completed: October 15, 2005
Cost: \$ 133,995.98
Fund Source: ACSI & Watershed Coop. Funds

Bond Forfeiture Reclamation

The Maryland Bureau of Mines administers the reclamation of lands affected by operations on which the permit has been revoked and the bond forfeited. The funds received from the forfeiture of bonds and the bond supplement reserve, when the bond is not sufficient, are used to reclaim the lands affected by operations on which the liability was charged on the bonds.

Bond Forfeiture Projects Completed During 2005

**4. TD MINING PERMIT 403 MINE FORFEITURE RECLAMATION PROJECT-
PHASE II**

Location: 1 mile southwest of Klondike. Allegany County.
Nature: Reclamation of 44 acres of surface coal mine bond
forfeiture land associated with the TD Mining
Permit SM-84-403 Bond Forfeiture. Construction of
the project is the second phase in reclamation of
the Bond Forfeiture site.
Contractor: Pine Mountain Coal Company
Date Completed: August 23, 2005
Construction Cost: \$ 383,525.00
Fund Source: MD-Federal AML Fund (\$187,308.00)
Bond Forfeiture & Bond Supplement (\$196,217.00)

Deep Mine Fund Reclamation

The Maryland Bureau of Mines administers the Deep Mine Fund, under the authority of Environment Article, Title 15, Subtitle 6, to reclaim deep mine related land and water problems in which there is not continuing liability or responsibility. During calendar year 2004 the Bureau completed the following projects using this fund.

Deep Mine Fund Projects Completed During 2005

- None Completed -

STATE OF MARYLAND
BUREAU OF MINES
Annual Report 2005
Acid Mine Drainage Section

Prepared By: Joseph E. Mills, Tamara Davis, and Michelle Arrington

The Acid Mine Drainage Section (AMDS), during the period of January 1, 2005 to December 31, 2005, began the upgrade of the existing Kempton Air Shaft Doser Project by installing an aeration system and a sediment collection system and completed the construction of six new treatment systems. During the year, AMDS also continued designing and permitting for six additional AMD remediation projects that are scheduled for construction during the summer of 2006. The Kempton Air Shaft Doser Project was upgraded to allow for the recovery of the downstream wetland and for the more efficient and effective treatment of the AMD at this site. The Project was begun during 2005 and will be completed in early 2006 and will improve four miles of Laurel Run, allowing for more improvements in the upper reaches of the Potomac River and complete recovery of approximately 5 acres of wetland. Since AMD remediation efforts were initiated in 1992, a total of 28 mine drainage controls have been constructed and are continuously operated and maintained by the Bureau of Mines personnel. These controls require ongoing maintenance and are improving 81.5 miles of AMD impaired stream in the Maryland coal region. Construction and upgrade costs for the work completed by AMDS in 2005 totaled \$1,612,512.00.

NEFF RUN LEACH BEDS AND LIMESTONE SAND APPLICATION PROJECT

PAD: MD 0171 SGA

Federal Grant: EPA 104 (b)(3) and FY 2003 ACSI

Location: One mile north of Midland, Allegany County, Maryland. There are 3 project areas in Neff Run and its tributaries.

Size: A total of approximately two acres for the leach bed.

Nature, Goal, Type of Treatment System: Three Alkaline Leach Beds and two limestone sand dumpsites and a stream reconstruction.

Status: Complete.

Contractor: Excavating Associates

Construction Start: October 2004

Construction Completion: July 2005

Cost: \$192,500 for construction.

Fund Source: \$95,500 from EPA Regions 3 104 (b) (3), \$97,000 from ACSI

BOM Coordinator: Joe Mills

CRELLIN SCHOOL PLAYGROUND REGRADE AND DRAIN PROJECT

PAD: MD000247AMA

Federal Grant: ACSI FY 2004

Location: Behind the Crellin Elementary School, Crellin, Garrett County, Maryland.

Size: 0.5 acre.

Nature, Goal, Type of Treatment System: Regrading of a small area and the installation of 3 sub-surface drains. This project will collect seepage from under the playground area and direct it into the AMD Treatment project.

Status: Complete.

Contractor: John Duckworth Excavating

Construction Start: April 2005

Construction Completion: May 2005

Cost: \$9,000

Fund Source: \$9,000 from Deep Mine Funds.

BOM Coordinator: Joe Mills

MIDLOTHIAN SCHOOL YARD PYROLUCITE PROJECT

PAD: MD 0125

Federal Grant: FY 05 ACSI

Location: Midlothian, Allegany County, Maryland

Size: Approximately 2 Acres

Nature, Goal, Type of Treatment System: Two Pyrolucite Beds. The system is expected to treat approximately 30 gpm of AMD from a pH of 4.0 to 7.0.

Status: Complete

Contractor: Pine Mountain Coal Company

Cost: \$ 148,570

Funding Source: ACSI (\$23,570) and Watershed Cooperative Grant (\$125,000) through RC&D

BOM Coordinator: Joe Mills and Mark Carney

CRELLIN SCHOOL AMD AND RECLAMATION PROJECT

PAD: MD000247AMA

Federal Grant: ACSI FY 2004

Location: Behind the Crellin Elementary School, Crellin, Garrett County, Maryland.

Size: 5 acres.

Nature, Goal, Type of Treatment System: Construction of 2 small passive Treatment Cells and 2 small alkaline leach beds, removal and regarding of approximately 5 acres of abandoned coal tippel refuse. This system will treat about 20 gallons of AMD per minute with a pH 5.5 and an iron concentration of about 30 mg/l. The resultant discharge pH will be 7.0 with iron concentration of less than 3.0 mg/l with excess alkalinity.

Current Status: Complete

Contractor: Kiddy Contracting

Construction Start: Summer 2005

Construction Completion: October 2005

Cost: \$129,000

Fund Source: \$29,000 from ACSI, \$100,000 from Watershed Cooperative Grant through the Garrett County Community Action Committee.

BOM Coordinator: Joe Mills

KEMPTON MINE DISCHARGE RECLAMATION PROJECT

PAD: MD 207 SGA

Federal Grant: EPA Funds, Watershed Cooperative Grant, ACSI Grant

Location: Approximately 2 miles east of the Fairfax Stone, and 2 miles northwest of Kempton, Garrett County, Maryland off of Kempton Road.

Size: 6 acres.

Nature, Goal, Type of Treatment System: Construction a Maelstrom Aerator, 2 settling ponds, a sludge pump, A solids collection system and the relocation of Laurel Run. These efforts will enhance the natural wetland below the site. This system will improve the effectiveness of the existing doser, resulting in less neutralizing material being used and less sediment entering and clogging the existing wetland.

Current Status: 80% complete.

Contractor: BYCO, Inc.

Construction Start: July 2005

Estimated Construction Completion: March 2006

Cost: \$678,742* (*plus \$94,000 to purchase Maelstrom Oxidizer = \$772,742)

Fund Source: \$568,394.92 from the U.S. EPA Region 3 104 (b)(3) funds, Watershed Cooperative Grant to RC&D: \$94,000, and 10% Set Aside \$110,347.08

BOM Coordinator: Joe Mills

AMISH ROAD II ALD/NATURAL WETLANDS ENHANCEMENT PROJECT

PAD: MD 209 SGA

Federal Grant: EPA FFY03 Section 104(b)(3) Funds

Location: Approximately 2 miles west of Grantsville, Garrett County, Maryland off of Amish Road.

Size: 4 acres.

Nature, Goal, Type of Treatment System: Construction a series of passive Treatment Cells and enhancement of approximately 3 acres of existing wetland area. Efforts will be made to enhance and possibly construct natural wetlands to offer habitat for waterfowl and other mammals and birds. This system will treat about a maximum of 100 gallons of AMD per minute with a pH 5.5 and an iron concentration of about 30 mg/l. The resultant discharge pH will be 7.0 with iron concentration of less than 3.0 mg/l with excess alkalinity. The Casselman River is a high quality mountain stream and is classified for water contact recreation and aquatic life. It is moderately impaired by AMD along the stretch of river adjacent to this site. The Department of Natural Resources has identified this stretch for the recolonization of the State endangered Hellbender (large aquatic salamander) if the prime water quality is restored.

Current Status: Complete

Construction Start: Summer 2005

Construction Completion: Fall 2005

Cost: \$159,200

Fund Source: U.S. EPA Region 3 104 (b)(3) funds

BOM Coordinator: Tammy Davis

SHALLMAR DOSER**PAD:** MD 0000525 SGA**Federal Grant:** Watershed Cooperative Grant, ACSI Grant, Title 4 Abandoned Mine Lands Fund**Location:** Shallmar Road, 1 Mile west of MD Route 38**Size:** < 1 Acre**Nature, Goal, Type of Treatment System:** An Aquafix water wheel type doser to treat a significant source of AMD that discharges approx. 150 gpm at a 3.5 pH.**Current Status:** Complete**Construction Start:** Summer 2005**Construction Completion:** Fall 2005**Cost:** \$206,500**Fund Source:** \$100,000 Watershed Cooperative Grant through RC&D, \$25,750 ACSI Grant, and 80,750 Title IV Abandoned Mine Lands Fund**BOM Coordinator:** Michelle Arrington

FOR CALENDAR YEAR 2005

**MINE FOREMAN AND FIRE BOSS
EXAMINATIONS AND CERTIFICATIONS**

The number of Mine Foreman and Fire Boss applicants examined and certified from 1991 through 2005 are identified below.

YEAR	APPLICANTS EXAMINED		APPLICANTS CERTIFIED	
	Mine Foreman	Fire Boss	Mine Foreman	Fire Boss
2005	0	0	0	0
2004	1	4	3	4
2003	0	0	0	0
2002	12	2	12	2
2001	0	0	0	0
2000	14	8	14	8
1999	17	5	17	5
1998	13	5	13	5
1997	18	5	18	5
1996	0	0	4	0
1995	0	0	14*	0
1994	24	4	24	4
1993	25	8	25	8
1992	0	0	5*	0
1991	6	0	6	0

*These applicants were upgraded from Fire Boss to Foreman, based on years of experience, without taking an examination.

**INSPECTION AND ENFORCEMENT ACTIVITIES
2001-2005**

TYPE OF ACTION	2001	2002	2003	2004	2005
Inspections	784	960	919	879	1,019
Notices of Violations	6	9	19	17	26
Cessation Orders	0	1	4	2	0
Citizen Complaints	60	48	27	30	30
Bond Forfeitures	1	0	0	1	0

MINING PERMITS ISSUED BY YEAR AND PERMITTEE

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
1	1955	The George's Creek Lumber Company*
2	1955	Allegheny Engineering Company*
3	1955	B.M.W. Coal Company*
4	1955	Old Hampshire Coal Company, Inc.*
5	1955	Car and Gotfelly Construction Co.*
6	1955	M.H. Bigan Coal Company*
7	1955	Moran Coal Company*
8	1955	Allegheny Engineering Company*
9	1955	Schell Mining Company, Inc.*
10	1955	B & U Coal Company*
11	1955	Morgan Contracting Company**
12	1955	Romadale Coal Corporation*
13	1955	Cross Fuel Company*
14	1955	Highland Construction Company*
15	1955	Phoenix Big Vein Coal Company (Repermitted 338)*
16	1955	Moran Coal Company*
17	1955	T.J. Cramblett**
18	1955	Moscow-Georges Creek Coal Company*
19	1955	J.R. Thrasher Contracting & Stripping Co.*
20	1956	Moran Coal Company (Repermitted 333)*
21	1956	Schell Mining Company, Inc.**
22	1956	Savage Coal Company*
23	1956	Moran Coal Company*
24	1956	The Georges Creek Coal & Land Co.*
25	1957	Charles T. Clise*
26	1957	Allegheny Engineering Company*
27	1957	Goodwill Fuel Company*
28	1957	D.B.&B. Coal Company*
29	1957	Queen George's Creek Coal Company**
30	1957	Mack Coal Company**
31	1957	White Crest Coal Company, Inc.**
32	1957	D.B.&B. Coal Company*
33	1957	Moran Coal Company*
34	1957	Chelsie A. Liller*
35	1957	J.E. George Trucking Company**
36	1957	D.B.&B. Coal Company*
37	1957	J.&M. Coal Company**
38	1957	Casey Construction Company**
39	1958	Moran Coal Company*
40	1958	United Energy Coal, Inc.
41	1958	Buffalo Coal Company, Inc.*
42	1958	Casey Construction Company**
43	1958	Sara-Ki Coal Company, Inc.*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
44	1958	Yantus & Zubek Coal Company*
45	1958	Moran Coal Company*
46	1958	Casey Construction Company**
47	1958	Moran Coal Company*
48	1958	Moran Coal Company*
49	1958	Sara-Ki Coal Company, Inc.*
50	1958	Laurel Creek Company, Inc.**
51	1958	D.B.&B. Coal Company**
52	1958	Moon and Sons*
53	1959	George L. Smith Contracting Company*
54	1959	The Georges Creek Lumber Company*
55	1959	Moran Coal Company*
56	1959	North Branch Coal Corporation*
57	1959	George Coal Company**
58	1959	Samuel Compton & Company**
59	1959	Hoover & White*
60	1959	Laurel Creek Company, Inc.**
61	1959	The Eddy Fuel Company**
62	1959	J.R. Thrasher Contracting & Stripping Co.*
63	1959	Pittsburgh Coal Company*
64	1959	Mineral Coal Company, Inc., of West Virginia*
65	1959	Laurel Creek Company, Inc.*
66	1959	The Georges Creek Lumber Company*
67	1959	Chelsie A. Liller*
68	1959	Casey Contracting Company**
69	1959	Pine Mountain Coal Company*
70	1959	Opel and Brenneman*
71	1959	The Georges Creek Lumber Company*
72	1959	P.&J. Coal Company*
73	1959	Casey Contracting Company**
74	1959	Goodwill Fuel Company*
75	1959	D.B.&B. Coal Company*
76	1960	Baughman Contracting Company, Inc.*
77	1960	P&K Coal Company*
78	1960	Morgan Contracting Company*
79	1960	Buffalo Coal Company, Inc.*
80	1960	Buffalo Coal Company, Inc.*
81	1960	Randall Robertson*
82	1960	Hoover & White**
83	1960	James E. George*
84	1960	B.M.W. Coal Company, Inc.*
85	1960	Casey Contracting Company**
86	1960	Beener Coal Company*
87	1960	Moran Coal Company, Inc.*
88	1960	D&K Coal Company*
89	1960	Brenneman Brothers*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
90	1960	Mack Coal Company*
91	1960	Clarence Rodamar*
92	1960	James E. George*
93	1961	Casey Contracting Company**
94	1961	Winner Brothers*
95	1961	Moran Coal Company, Inc.*
96	1961	Big Vein Coal Company*
97	1961	Maryland Fuel Company, Inc.*
98	1961	Yantus-Zubek Coal Company*
99	1961	J.R. Thrasher Contracting & Stripping Co.*
100	1961	Trefall Bros., Inc.*
101	1961	Mack Coal Company*
102	1961	C.A. Liller Company*
103	1961	Cross & Brumage Coal Company*
104	1961	Beener Coal Company*
105	1961	D&K Coal Company*
106	1961	Mack Coal Company*
107	1961	Yantus and Zubek*
108	1961	Potomac Mining Company*
109	1962	Casey Contracting Company*
110	1962	Wilhelm Coal Company*
111	1962	The Georges Creek Lumber Company*
112	1962	Clark Coal Company*
113	1962	Casey Contracting Company*
114	1962	Casey Contracting Company*
115	1962	Douglas Coal Company*
116	1962	Red Lion Mining Corporation**
117	1962	Ebensburg Coal and Clay Company*
118	1963	James E. George*
119	1963	Ebensburg Coal and Clay Company*
120	1963	J.R. Thrasher Contracting & Stripping Co.*
121	1963	Moran Coal Company, Inc.*
122	1963	Buffalo Coal Company, Inc.*
123	1963	J.R. Thrasher Contracting & Stripping Co.*
124	1963	Win-More Mining & Construction Co., Inc.*
125	1963	Beener Coal Company*
126	1964	W.R. Nethken and Company, Inc.*
127	1964	Mack Coal Company*
128	1964	J.R. Thrasher Contracting & Stripping Co.*
129	1964	J. Russell Cravener*
130	1964	Chelsie A. Liller*
131	1964	The Georges Creek Lumber Company*
132	1964	Brenneman Brothers*
133	1965	W.R. Nethken and Company, Inc.*
134	1965	Richards and Parnell Coal Company*
135	1965	William Brashear*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
136	1965	W.R. Nethken and Company, Inc.*
137	1965	G&S Coal Company, Inc.*
138	1966	J.R. Thrasher Contracting & Stripping Co.*
139	1966	J.R. Thrasher Contracting & Stripping Co.*
140	1966	Shallmar Coal Company, Inc.*
141	1966	Randall Robertson**
142	1966	Ace Drilling Coal Company, Inc.*
143	1966	Beener Coal Company*
144	1966	Clarence Rodamer*
145	1967	Ginniman Coal Company*
146	1967	Raymond A. Wolf Mining Company*
147	1967	Menallen Coke Company*
148	1967	Russel Shafer*
149	1967	Homage Coal Co. (Emmett Duppstadt)*
150	1967	Twin States Coal Company**
151	1967	M.F. Fetterolf Coal Company, Inc.*
152	1967	Ebensburg Coal and Clay Company*
153	1968	Raymond A. Wolf Mining Co. (UPRC)*
154	1968	Michael Rostosky*
155	1968	Ginniman & Ware Coal Company*
156	1968	Harold H. Upole Coal Company*
157	1968	T.G.&C. Coal Company, Inc.*
158	1969	Clarence Rodamer Coal Company*
159	1969	Michael Rostosky Coal Company*
160	1969	Russel Shafer Coal Company*
161	1969	Buffalo Coal Company, Inc.*
162	1969	J.R. Thrasher Contracting & Stripping Co.***
163	1969	Buffalo Coal Company, Inc.*
164	1969	Union Coal Company*
165	1970	Win-More Mining & Construction Co., Inc.*
166	1970	Ginniman Coal Company*
167	1970	Upperman Coal Company*
168	1970	Frank Pulford**
169	1970	Winner Bros. Coal Company, Inc.*
170	1970	Russel Shafer*
171	1970	The Chief Coal Company*
172	1970	Mary Ruth Corporation*
173	1970	Oakland Coal Company*
174	1971	Bernard C. Drees*
175	1971	Delta Mining, Inc.*
176	1971	D&K Coal Company, Inc.*
177	1971	T.G.&C. Coal Company, Inc.*
178	1971	Emmett Duppstadt*
179	1971	Somerset Excavating, Inc.*
180	1971	Ayers Coal Company*
181	1971	Delta Mining, Inc.*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
182	1971	Patriot Mining Company, Inc.*
183	1971	Chief Coal Company*
184	1971	Cobra Mining, Inc.
185	1971	Bessemer Iron & Coal Company*
186	1971	Coal Lick Coal Company*
187	1971	Phillips Big Vein Coal Company*
188	1971	Ace Drilling Coal Company, Inc.*
189	1971	Buffalo Coal Company, Inc.*
190	1971	Buffalo Coal Company, Inc.*
191	1971	Keystone Coal and Development Company (Liability Assumed by Garrett County Roads Department)
192	1971	Ace Drilling Company, Inc.*
193	1972	Wilhelm Coal, Inc.*
194	1972	M.F. Fetterolf Coal Company, Inc.***
195	1972	Buffalo Coal Company, Inc.*
196	1972	Bessemer Iron & Coal Company*
197	1972	Grafton Coal Company*
198	1972	Jet Fuel Coal Company*
199	1972	Bessemer Iron & Coal Company*
200	1972	Chief Coal Company*
201	1972	Brashear Coal Company*
202	1972	Winner Bros. Coal Company, Inc.*
203	1972	Mary Ruth Corporation*
204	1972	Grafton Coal Company*
205	1972	Chief Coal Company*
206	1972	Upperman Coal Company*
207	1972	United Energy Coal, Inc.
208	1973	Sanner Bros. Coal Company*
209	1973	Delta Mining, Inc.*
210	1973	Markat, Inc.*
211	1973	Oakland Coal Company*
212	1973	Bessemer Iron & Coal Company*
213	1973	Clise Coal Company
214	1973	Inter-State Lumber Company*
215	1973	Buffalo Coal Company, Inc.*
216	1973	Brashear Coal Company***
217	1973	Bernard Drees Coal Company*
218	1973	Buffalo Coal Company, Inc.*
219	1973	G&S Coal Company, Inc.*
220	1974	Evans Coal Company*
221	1974	Bridgeview Coal Company*
222	1974	John Duckworth Coal Company*
223	1974	Edward Mikel*
224	1974	Delta Mining, Inc.*
225	1974	Northwest Coal Company, Inc.*
226	1974	Thrasher Coal Company**

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
227	1974	Winner Bros. Coal Company, Inc.*
228	1974	Bittinger Coal Company*
229	1974	Charles M. Filsinger*
230	1974	G&H Coal Company, Inc.*
231	1974	Hi-Note, Inc.*
232	1974	Buffalo Coal Company, Inc.*
233	1974	Oliver Mining Company**
234	1974	Clise Coal Company*
235	1974	Markat, Inc.*
236	1974	Delta Mining, Inc.*
237	1974	Bridgeview Coal Company*
238	1974	Burnham Coal Company, Inc.*
239	1974	Highland Mining*
240	1974	Buffalo Coal Company, Inc.*
241	1975	Buffalo Coal Company, Inc.*
242	1975	Hopwood Strip Mine, Inc.**
243	1975	Ponderosa Coal Company, Inc.*
244	1975	Markat, Inc.*
245	1975	Phillips Coal, Inc.*
246	1975	Lambert Coal Company*
247	1975	United Energy Coal, Inc.
248	1975	Buffalo Coal Company, Inc.*
249	1975	Cobra Fuels*
250	1975	Laoc Coal Company*
251	1975	Tower Resources, Inc.*
252	1975	Phillips Coal, Inc.*
253	1975	Pine Mt. Coal Company*
254	1975	T.G.&C. Coal Company*
255	1975	Allegheny Mining Company*
256	1975	Bridgeview Coal Company*
257	1975	A&R Coal Company*
258	1975	Clinton Coal Company**
259	1975	Tower Resources, Inc.*
260	1975	Yough Tree Farm*
261	1975	Russel Shafer***
262	1975	Northwest Coal Company**
263	1975	Allegheny Mining Corporation*
264	1975	Brashear Coal Company
265	1975	Bittinger Coal Company*
266	1975	Delta Mining, Inc.*
267	1975	Bittinger Coal Company*
268	1975	Clyde Marsh Coal Company*
269	1975	Hungry Hollow Coal Company*
270	1975	Clise Coal Company*
271	1975	A&R Coal Company*
272	1975	Action Mining, Inc.*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
273	1975	Win-More Mining & Construction
274	1975	Evans Coal Company*
275	1975	Buffalo Coal Company, Inc.*
276	1975	Buffalo Coal Company, Inc.*
277	1975	Allegheny Mining Corporation*
278	1976	Inter-State Lumber Company*
279	1976	Buffalo Coal Company, Inc.*
280	1976	Delta Mining, Inc.*
281	1976	Rondell Company*
282	1976	Phillips Coal, Inc.*
283	1976	G&H Coal Company, Inc.*
284	1976	Tower Resources, Inc.*
285	1976	Clinton Coal Company**
286	1976	Winner Bros. Coal Company, Inc.*
287	1976	T.L. Moran, Inc.*
288	1976	Delta Mining, Inc.*
289	1976	Pine Mt. Coal Company*
290	1976	Delta Mining, Inc.*
291	1976	George Nolan**
292	1976	Alexander Coal Co.*
293	1976	Pine Mt. Coal Company*
294	1976	Arlen Miller***
295	1976	Action Mining, Inc.*
296	1976	Bessemer Iron & Coal Company**
297	1977	Oakland Coal Company*
298	1977	Bittinger Coal Company*
299	1977	Inter-State Lumber, Inc.*
300	1977	Garbart Coal Company*
301	1977	Pine Mt. Coal Company*
302	1977	L.C. Coal Company, Inc.*
303	1977	Ginniman Brothers Coal Company**
304	1977	Buffalo Coal Company, Inc.*
305	1977	Wood Products, Inc.*
306	1977	Bridgeview Coal Company*
307	1977	T.L. Moran, Inc.*
308	1977	Best Coal Stripping, Inc.**
309	1977	Delta Mining, Inc.*
310	1977	Oakland Coal Company*
311	1977	Primrose Coal Company*
312	1977	R.A.K. Coal Company, Inc.**
313	1977	G&S Coal Company*
314	1977	Wilhelm Coal, Inc.**
315	1977	Clise Coal Company*
316	1977	Brawal Mining, Inc.*
317	1977	John R. Livingston**
318	1977	Winner Bros. Coal Company, Inc.

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
319	1977	John Duckworth Coal Company*
320	1977	Kelley Enterprises*
321	1978	Delta Mining, Inc.*
322	1978	Bridgeview Coal Company*
323	1978	Ayers Coal Company*
324	1978	John Duckworth Coal Company*
325	1978	G&S Coal Company, Inc.*
326	1978	Buffalo Coal Company, Inc.
327	1978	Buffalo Coal Company, Inc.*
328	1978	Buffalo Coal Company, Inc.
329	1978	Winner Bros. Coal Company, Inc.*
330	1978	Inter-State Lumber Company*
331	1978	R.A.K. Coal Company***
332	1978	Seneca Mining Company*
333	1978	Westvaco Corporation*
334	1978	Buffalo Coal Company, Inc.*
335	1978	Inter-State Lumber Company**
336	1978	Inter-State Lumber Company*
337	1978	Kirby Energy, Inc.*
338	1978	Barton Mining Company, Inc.
339	1978	Wilhelm Coal, Inc.*
340	1978	Fetteroff Mining, Inc.*
341	1979	Eastern Mining Systems, Inc.**
342	1979	Primrose Coal Company*
343	1979	L.C. Coal Company*
344	1979	Bridgeview Coal Company*
345	1979	Delta Mining, Inc.**
346	1979	Inter-State Lumber Company*
347	1979	Kelley Enterprises*
348	1979	Schwinabart & Green, Joint Venture*
349	1979	Wilhelm Coal, Inc.**
350	1980	Bridgeview Coal Company*
351	1980	Winner Bros. Coal Company, Inc.*
352	1980	John Duckworth Coal Company*
353	1980	Winner Bros. Coal Company, Inc.*
354	1980	Brawal Mining, Inc.*
355	1980	Hi-Note, Inc.*
356	1980	G&S Coal Company, Inc.***
357	1980	Richard Duckworth Coal Company*
358	1980	Bridgeview Coal Company*
359	1980	Buffalo Coal Company, Inc.
360	1980	Buffalo Coal Company, Inc.*
361	1980	Pamela Mines, Inc.**
362	1980	Alpha Mining, Inc.*
363	1980	Pamela Mines, Inc.**

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
364	1980	John Duckworth Coal Company*
365	1980	G&S Coal Company, Inc.
366	1980	Buffalo Coal Company, Inc.*
367	1980	Buffalo Coal Company, Inc.
368	1980	United Energy Coal, Inc.
369	1980	Bittinger Coal Company*
370	1982	Keystone Mt. Development Company*
371	1982	Eagle Mining, Inc.*
372	1982	John Duckworth Coal Company
373	1982	Kirby Energy, Inc.**
374	1982	Winner Bros. Coal Company, Inc.*
375	1982	Win-More Mining & Construction Company*
376	1982	Jones Coal, Inc.**
377	1982	Allegheny Mining Corporation*
378	1982	Delta Mining, Inc.**
379	1982	Masteller Coal Company*
380	1982	Fairview Coal Company (Repermitted 399)*
381	1982	Richard Duckworth Coal Company*
382	1983	Pine Mt. Coal Company*
383	1983	Allegheny Mining Corporation*
384	1983	Evans Coal Company*
385	1983	Winner Bros. Coal Company, Inc.
386	1983	Jones Mining, Inc.*
387	1983	Hilltop Construction Company**
388	1983	Fetterolf Mining, Inc.*
389	1983	Winner Bros. Coal Company, Inc.*
390	1983	C.J. Merlo, Inc.*
391	1983	Oak Springs Coal Company*
392	1984	Westvaco Resources, Inc.*
393	1984	Patriot Mining Company, Inc.
394	1984	Action Mining, Inc.*
395	1984	Stan-Jan Excavating, Inc.*
396	1984	Allegheny Mining Corporation*
397	1985	Michael R. McGowan*
398	1985	Brashear Coal Company
399	1985	Fairview Coal Company
400	1985	Delta Mining, Inc.*
401	1985	Buffalo Coal Company, Inc.***
402	1985	Pine Mt. Coal Company*
403	1985	T.D. Mining Company**
404	1986	Clise Coal Company
405	1986	Jones Coal, Inc.**
406	1986	Patriot Mining Company, Inc.*
407	1986	United Energy Coal, Inc.
408	1986	Tri Star Mining, Inc.*
409	1986	Buffalo Coal Company, Inc.*

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
410	1987	J. Walter Wassell*
411	1987	Jenkins Development Company
412	1987	John Duckworth Coal Company***
413	1988	Buffalo Coal Company, Inc.*
414	1989	United Energy Coal, Inc.
415	1989	Pine Mt. Coal Company*
416	1989	Action Mining, Inc.*
417	1989	Tri Star Mining, Inc.*
418	1991	Tri Star Mining, Inc.*
419	1991	Tri Star Mining, Inc.
420	1991	Pine Mt. Coal Company
421	1992	G&S Coal Company, Inc.
422	1992	Buffalo Coal Company, Inc.
423	1992	United Energy Coal, Inc.
424	1995	Pine Mt. Coal Company
425	1995	Tri Star Mining, Inc.*
426	1996	Tri Star Mining, Inc.*
427	1996	Barton Mining Company, Inc.
428	1997	Mettiki Coal, LLC
429	1997	Tri Star Mining, Inc.
430	1998	G&S Coal Company, Inc.
431	1998	Patriot Mining Company, Inc.
432	1999	Barton Mining Company, Inc.
433	1999	Win-More Mining & Construction
434	1999	Tri Star Mining, Inc.
435	2000	G&S Coal Company, Inc.
436	2000	Brashear Coal Mines
437	2001	Cobra Mining, Inc.
438	2001	Mountaineer Mining Corp.
439	2001	United Energy Coal, Inc.
440	2001	G&S Coal Company, Inc.
441	2002	G&S Coal Company, Inc.
442	2002	Buffalo Coal Company, Inc.
443	2002	Vindex Energy Corporation
444	2003	Tri Star Mining, Inc.
445	2004	Moran Coal Company
446	2004	Moran Coal Company
447	2005	Jenkins Development Company
448	2005	Savage Mountain Minerals, Inc.
449	2005	Clise Coal Company

DEEP MINES

DM 101	1977	Mettiki Coal, LLC
DM 102	1977	Masteller Coal Company*
DM 103	1977	Mt. Top Coal Company*
DM 104	1977	Mettiki Coal Corporation
DM 105	1977	Mettiki Coal Corporation

DM 106	1978	A&J Coal Corporation**
DM 107	1982	Masteller Coal Company*
DM 108	1989	Anker West Virginia Mining Co., Inc.
DM 109	1991	Anker West Virginia Mining Co., Inc.
DM 110	1992	Masteller Coal Company**
DM 111	2000	George Creek, Inc.
DM 112	2003	Backbone Mountain, LLC

<u>Permit No.</u>	<u>Year Issued</u>	<u>Permittee</u>
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TIPPLES AND GOB PILES

SC-83-101	1983	Buffalo Coal Company*
SC-83-102	1983	Buffalo Coal Company*
SC-83-103	1983	Buffalo Coal Company*
SC-83-104	1983	Buffalo Coal Company
SC-83-105	1983	Buffalo Coal Company*
SC-83-106		Permit Not Issued
SC-83-107	1983	Delta Coal Sales, Inc.**
SC-83-108	1984	Delta Coal Sales, Inc.*
SC-83-109		Permit Not Issued
SC-83-110	1983	United Energy Coal, Inc.
SC-83-111	1983	Westvaco Corporation*
SC-83-112	1983	United Energy Coal, Inc.*
SC-83-113		Permit Not Issued
SC-83-114	1984	Ever, Inc.*
SC-83-115		Permit Not Issued
SC-87-116	1987	Franklin Coal Yard, LLC
SC-87-117	1987	Tri Star Mining, Inc.
SC-87-118	1987	Patriot Mining Company, Inc.

* Operation Completed and Bond Released

** Forfeiture of Bond

*** Not Activated